

WHAT IS CLAIMED IS:

1           1. A method of generating a customized digital image, the method  
2 comprising:  
3           receiving a first digital image;  
4           determining one or more placement regions from the first digital image, each  
5 placement region of the one or more placement regions identifying a location on the first  
6 digital image for placing a digital image from a first set of digital images;  
7           identifying, for each placement region of the one or more placement regions, a  
8 digital image from the first set of digital images to be placed in the placement region; and  
9           for each placement region of the one or more placement regions, placing a  
10 digital image from the first set of digital images identified for the placement region in the  
11 placement region to generate the customized digital image.

1           2. The method of claim 1 wherein the first set of digital images comprises  
2 digital image copies of a second set of digital images.

1           3. The method of claim 2 further comprising:  
2           creating a link between at least one digital image in the customized digital  
3 image and the corresponding digital image in the second set of digital images.

1           4. The method of claim 3 further comprising:  
2           receiving a user input indicating selection of the at least one digital image in  
3 the customized digital image; and  
4           in response to receiving the user input, retrieving the digital image  
5 corresponding to the at least one digital image from the second set of digital images.

1           5. The method of claim 1 wherein receiving the first digital image  
2 comprises:  
3           scanning a paper medium on which the one or more placement regions have  
4 been indicated to generate the first digital image.

1           6. The method of claim 1 wherein receiving the first digital image  
2 comprises:  
3           photographing a paper medium on which the one or more placement regions  
4 have been indicated to generate the first digital image.

1                   7.       The method of claim 1 wherein the one or more placement regions on  
2 the first digital image are indicated by one or more bounded regions.

1                   8.       The method of claim 1 wherein the one or more placement regions on  
2 the first digital image are indicated by one or more text fragments.

1                   9.       The method of claim 1 wherein the one or more placement regions on  
2 the first digital image are indicated by one or more marks.

1                   10.      The method of claim 1 wherein identifying, for each placement region  
2 of the one or more placement regions, a digital image from the first set of digital images to be  
3 placed in the placement region comprises:

4                   determining image identification information associated with at least a first  
5 placement region of the one or more placement regions from the first digital image, the image  
6 identification information identifying an attribute of a digital image to be placed in the at  
7 least first placement region; and

8                   identifying a first digital image from the first set of digital images to be placed  
9 in the at least first placement region based upon the image identification information  
10 associated with the at least first placement region.

1                   11.      The method of claim 10 wherein identifying the first digital image  
2 from the first set of digital images to be placed in the at least first placement region based  
3 upon the image identification information associated with the at least first placement region  
4 comprises:

5                   identifying a digital image from the first set of digital images as the first  
6 digital image if information associated with the digital image matches the image  
7 identification information associated with the at least first placement region.

1                   12.      The method of claim 1 wherein identifying, for each placement region  
2 of the one or more placement regions, a digital image from the first set of digital images to be  
3 placed in the placement region comprises:

4                   determining image identification information associated with at least a first  
5 placement region of the one or more placement regions from the first digital image, the image  
6 identification information identifying an attribute of a digital image to be placed in the at  
7 least first placement region;

8                   determining a time stamp associated with each digital image in the first set of  
9    digital images; and

10                  identifying a first digital image from the first set of digital images to be placed  
11    in the at least first placement region based upon the image identification information  
12    associated with the at least first placement region and the time stamp associated with each  
13    digital image in the first set of digital images.

1                  13.    The method of claim 1 wherein placing a digital image from the first  
2    set of digital images identified for the placement region in the placement region to generate  
3    the customized digital image comprises:

4                  adjusting the digital image to fit the placement region.

1                  14.    The method of claim 13 wherein adjusting the digital image to fit the  
2    placement region comprises scaling the digital image to fit the placement region.

1                  15.    The method of claim 13 wherein adjusting the digital image to fit the  
2    placement region comprises cropping the digital image to fit the placement region.

1                  16.    The method of claim 1 wherein:  
2                  for each placement region of the one or more placement regions, a size of the  
3    digital image placed in the placement region is determined by a size of the placement region.

1                  17.    A method of generating a customized digital image, the method  
2    comprising:

3                  receiving a signal comprising digital signals representative of a plurality of  
4    digital images;

5                  determining a template image from the plurality of digital images;

6                  determining one or more placement regions from the template image, each  
7    placement region of the one or more placement regions identifying a location on the template  
8    image for receiving a digital image from the plurality of digital images;

9                  identifying, for each placement region of the one or more placement regions, a  
10    digital image from the plurality of digital images to be placed in the placement region; and

11                 for each placement region of the one or more placement regions, placing a  
12    copy of a digital image from the plurality of digital images identified for the placement  
13    region in the placement region to generate the customized digital image.

1                   18. A method of generating a customized digital image, the method  
2 comprising:  
3                   receiving a first digital image;  
4                   analyzing the first digital image to determine a first placement region on the  
5 first digital image for placing a second digital image; and  
6                   placing the second digital image in the first placement region on the first  
7 digital image to generate the customized digital image.

1                   19. The method of claim 18 wherein the second digital image is a copy of  
2 a third digital image.

1                   20. The method of claim 19 further comprising:  
2                   creating a link between the second digital image placed in the first placement  
3 region in the first digital image and the third digital image.

1                   21. The method of claim 20 further comprising:  
2                   receiving a user input indicating selection of the second digital image placed  
3 in the first placement region in the customized image; and  
4                   in response to receiving the user input, retrieving the third digital image.

1                   22. The method of claim 18 wherein receiving the second digital image  
2 comprises:  
3                   scanning a paper medium on which the first placement region is marked to  
4 generate the first digital image.

1                   23. The method of claim 18 wherein receiving the first digital image  
2 comprises:  
3                   photographing a paper medium on which the first placement region is marked  
4 to generate the first digital image.

1                   24. A method of generating a customized digital image using a digital  
2 camera, the method comprising:  
3                   capturing one or more images using the digital camera;  
4                   capturing a template image by scanning a paper medium;

5 determining one or more placement regions from the template image, each  
6 placement region of the one or more placement regions identifying a location on the template  
7 image for placing an image from the one or more images captured using the digital camera;  
8 identifying, for each placement region of the one or more placement regions,  
9 an image from the one or more images to be placed in the placement region; and  
10 for each placement region of the one or more placement regions, placing a  
11 copy of an image from the one or more images identified for the placement region in the  
12 placement region to generate the customized digital image.

1 25. A method of generating a customized digital image using a digital  
2 camera, the method comprising:  
3 using the digital camera to capture one or more images;  
4 using the digital camera to capture a template image, the template image  
5 comprising one or more bounded regions, each bounded region of the one or more bounded  
6 regions identifying a location on the template image for placing an image of the one or more  
7 images captured using the digital camera; and  
8 obtaining the customized image from the digital camera, wherein the  
9 customized digital image is generated by placing a copy of at least one image from the one or  
10 more images in at least one bounded region on the template image.

1 26. The method of claim 25 wherein using the digital camera to capture the  
2 template image comprises:  
3 imprinting the one or more bounded regions on a paper medium;  
4 selecting a button on the digital camera; and  
5 using the digital camera to capture an image of the paper medium while the  
6 button the digital camera is selected.

1 27. A system for generating a customized digital image, the system  
2 comprising:  
3 an input module; and  
4 a processing module;  
5 wherein the input module is configured to receive a first digital image; and  
6 wherein the processing module is configured to:

7                   determine one or more placement regions from the first digital image,  
8    each placement region of the one or more placement regions identifying a location on the first  
9    digital image for placing a digital image from a first set of digital images;

10                  identify, for each placement region of the one or more placement  
11    regions, a digital image from the first set of digital images to be placed in the placement  
12    region; and

13                  for each placement region of the one or more placement regions, place  
14    a digital image from the first set of digital images identified for the placement region in the  
15    placement region to generate the customized digital image.

1                  28.    The system of claim 27 wherein the first set of digital images  
2    comprises digital image copies of a second set of digital images.

1                  29.    The system of claim 28 wherein the processing module is further  
2    configured to create a link between at least one digital image in the customized digital image  
3    and the corresponding digital image in the second set of digital images.

1                  30.    The system of claim 29 wherein:  
2                  the input module is configured to receive a user input indicating selection of  
3    the at least one digital image in the customized digital image; and  
4                  the processing module is configured to, in response to the user input, retrieve  
5    the digital image corresponding to the at least one digital image from the second set of digital  
6    images.

1                  31.    The system of claim 27 further comprising a scanner configured to  
2    scan a paper medium on which the one or more placement regions have been indicated to  
3    generate the first digital image.

1                  32.    The system of claim 27 further comprising an image capture module  
2    configured to photograph a paper medium on which the one or more placement regions have  
3    been indicated to generate the first digital image.

1                  33.    The system of claim 27 wherein the one or more placement regions on  
2    the first digital image are indicated by one or more bounded regions.

1                   34. The system of claim 27 wherein the one or more placement regions on  
2 the first digital image are indicated by using one or more text fragments.

1                   35. The system of claim 27 wherein the one or more placement regions on  
2 the first digital image are indicated by one or more marks.

1                   36. The system of claim 27 wherein in order to identify, for each  
2 placement region of the one or more placement regions, a digital image from the first set of  
3 digital images to be placed in the placement region, the processing module is configured to:  
4                   determine image identification information associated with at least a first  
5 placement region of the one or more placement regions from the first digital image, the image  
6 identification information identifying an attribute of a digital image to be placed in the at  
7 least first placement region; and

8                   identify a first digital image from the first set of digital images to be placed in  
9 the at least first placement region based upon the image identification information associated  
10 with the at least first placement region.

1                   37. The system of claim 36 wherein in order to identify the first digital  
2 image from the first set of digital images to be placed in the at least first placement region  
3 based upon the image identification information associated with the at least first placement  
4 region, the processing module is configured to:

5                   identify a digital image from the first set of digital images as the first digital  
6 image if information associated with the digital image matches the image identification  
7 information associated with the at least first placement region.

1                   38. The system of claim 27 wherein in order to identify, for each  
2 placement region of the one or more placement regions, a digital image from the first set of  
3 digital images to be placed in the placement region, the processing module is configured to:  
4                   determine image identification information associated with at least a first  
5 placement region of the one or more placement regions from the first digital image, the image  
6 identification information identifying an attribute of a digital image to be placed in the at  
7 least first placement region;

8                   determine a time stamp associated with each digital image in the first set of  
9 digital images; and

10 identify a first digital image from the first set of digital images to be placed in  
11 the at least first placement region based upon the image identification information associated  
12 with the at least first placement region and the time stamp associated with each digital image  
13 in the first set of digital images.

1 39. The system of claim 27 wherein the processing module is configured  
2 to place a digital image from the first set of digital images identified for the placement region  
3 in the placement region to generate the customized digital image by adjusting the digital  
4 image to fit the placement region.

1 40. The system of claim 39 wherein the processing module adjusts the  
2 digital image to fit the placement region by scaling the digital image to fit the placement  
3 region.

1 41. The system of claim 39 wherein the processing module adjusts the  
2 digital image to fit the placement region by cropping the digital image to fit the placement  
3 region.

1 42. The system of claim 27 wherein:  
2 for each placement region of the one or more placement regions, a size of the  
3 digital image placed in the placement region is determined by a size of the placement region.

1 43. A digital camera that incorporates the system of claim 27.

1 44. A copying machine that incorporates the system of claim 27.

1 45. A system for generating a customized digital image, the system  
2 comprising:  
3 a processor; and  
4 a memory coupled to the processor, the memory configured to store a plurality  
5 of code modules for execution by the processor, the plurality of code modules including:  
6 a code module for receiving a signal comprising digital signals  
7 representative of a plurality of digital images;  
8 a code module for determining a template image from the plurality of  
9 digital images;

10 a code module for determining one or more placement regions from  
11 the template image, each placement region of the one or more placement regions identifying  
12 a location on the template image for receiving a digital image from the plurality of digital  
13 images;

14 a code module for identifying, for each placement region of the one or  
15 more placement regions, a digital image from the plurality of digital images to be placed in  
16 the placement region; and

17 a code module for placing, for each placement region of the one or  
18 more placement regions, a copy of a digital image from the plurality of digital images  
19 identified for the placement region in the placement region to generate the customized digital  
20 image.

1 46. A system for generating a customized digital image, the system  
2 comprising:

3 a processor; and

4 a memory for storing a program;

5 wherein the processor is operative with the program to:

6 receive a first digital image;

7 receive a second digital image;

8 analyze the second digital image to determine a first placement region  
9 on the second digital image for placing the first digital image; and

10 place the first digital image in the first placement region on the second  
11 digital image to generate the customized digital image.

1 47. The system of claim 46 wherein the first digital image is a copy of a  
2 third digital image.

1 48. The system of claim 47 wherein the processor is operative with said  
2 program to create a link between the first digital image placed in the first placement region in  
3 the second digital image and the third digital image.

1 49. The system of claim 48 wherein the processor is operative with said  
2 program to:

3 receive a user input indicating selection of the first digital image placed in the  
4 first placement region in the customized image; and

5 in response to receiving the user input, to retrieve the third digital image.

1 50. The system of claim 46 wherein the processor is operative with said  
2 program to scan a paper medium on which the first placement region is marked to generate  
3 the first digital image.

1 51. The system of claim 46 wherein the processor is operative with said  
2 program to photograph a paper medium on which the first placement region is marked to  
3 generate the first digital image.

1 52. A digital camera comprising:

2 a processor; and

3 a memory for storing a program;

4 wherein the processor is operative with the program to:

5 receive one or more images;

6 receive a template image;

7 determine one or more placement regions from the template image,

8 each placement region of the one or more placement regions identifying a location on the  
9 template image for placing an image from the one or more images captured using the digital  
10 camera;

11 identify, for each placement region of the one or more placement  
12 regions, an image from the one or more images to be placed in the placement region; and

13 for each placement region of the one or more placement regions, place  
14 a copy of an image from the one or more images identified for the placement region in the  
15 placement region to generate the customized digital image.

1 53. The digital camera of claim 52 further comprising a first button which  
2 when selected indicates that an image received by the digital camera is a template image.

1 54. An apparatus for generating a customized digital image, the apparatus

2 comprising:

3 a processor; and

4 a memory for storing a program;

5 wherein the processor is operative with the program to:

6 receive a first image;

7 determine a first placement region and a second placement region from  
8 the first image; and

9 compose the customized digital image by placing a second image in  
10 the first placement region on the first image and by placing a third image in the second  
11 placement region on the first image.

1 55. A digital camera that incorporates the apparatus of claim 54.

1 56. A copier machine that incorporates the apparatus of claim 54.

1                   57.     A computer program product stored on a computer readable storage  
2     medium for generating a customized digital image, the computer program comprising:

3 code for receiving a first digital image;

4 code for determining one or more placement regions from the first digital

5 image, each placement region of the one or more placement regions identifying a location on  
6 the first digital image for placing a digital image from a first set of digital images;

7 code for identifying, for each placement region of the one or more placement  
8 regions, a digital image from the first set of digital images to be placed in the placement  
9 region; and

10 for each placement region of the one or more placement regions, code for  
11 placing a digital image from the first set of digital images identified for the placement region  
12 in the placement region to generate the customized digital image.

1                       58.     The computer program product of claim 57 wherein the first set of  
2 digital images comprises digital image copies of a second set of digital images, and the  
3 computer program product further comprises code for creating a link between at least one  
4 digital image in the customized digital image and the corresponding digital image in the  
5 second set of digital images.

1 59. The computer program product of claim 58 further comprising:

2 code for receiving a user input indicating selection of the at least one digital  
3 images in the customized digital image; and

4 in response to receiving the user input, code for retrieving the digital image  
5 corresponding to the at least one digital image from the second set of digital images.

1                   60.    The computer program product of claim 57 wherein the code for  
2 receiving the first digital image comprises:

3                   code for scanning a paper medium on which the one or more placement  
4 regions have been indicated to generate the first digital image.

1                   61.    The computer program product of claim 57 wherein the code for  
2 receiving the first digital image comprises:

3                   code for photographing a paper medium on which the one or more placement  
4 regions have been indicated to generate the first digital image.

1                   62.    The computer program product of claim 57 wherein the one or more  
2 placement regions on the first digital image are indicated by one or more bounded regions.

1                   63.    The computer program product of claim 57 wherein the one or more  
2 placement regions on the first digital image are indicated by one or more text fragments.

1                   64.    The computer program product of claim 57 wherein the one or more  
2 placement regions on the first digital image are indicated by one or more marks.

1                   65.    The computer program product of claim 57 wherein the code for  
2 identifying, for each placement region of the one or more placement regions, a digital image  
3 from the first set of digital images to be placed in the placement region comprises:

4                   code for determining image identification information associated with at least  
5 a first placement region of the one or more placement regions from the first digital image, the  
6 image identification information identifying an attribute of a digital image to be placed in the  
7 at least first placement region; and

8                   code for identifying a first digital image from the first set of digital images to  
9 be placed in the at least first placement region based upon the image identification  
10 information associated with the at least first placement region.

1                   66.    The computer program product of claim 65 wherein the code for  
2 identifying the first digital image from the first set of digital images to be placed in the at  
3 least first placement region based upon the image identification information associated with  
4 the at least first placement region comprises:

5 code for identifying a digital image from the first set of digital images as the  
6 first digital image if information associated with the digital image matches the image  
7 identification information associated with the at least first placement region.

1 67. The computer program product of claim 57 wherein the code for  
2 identifying, for each placement region of the one or more placement regions, a digital image  
3 from the first set of digital images to be placed in the placement region comprises:

4 code for determining image identification information associated with at least  
5 a first placement region of the one or more placement regions from the first digital image, the  
6 image identification information identifying an attribute of a digital image to be placed in the  
7 at least first placement region;

8 code for determining a time stamp associated with each digital image in the  
9 first set of digital images; and

10 code for identifying a first digital image from the first set of digital images to  
11 be placed in the at least first placement region based upon the image identification  
12 information associated with the at least first placement region and the time stamp associated  
13 with each digital image in the first set of digital images.

1 68. The computer program product of claim 57 wherein:  
2 for each placement region of the one or more placement regions, a size of the  
3 digital image placed in the placement region is determined by a size of the placement region;  
4 and  
5 the code for placing a digital image from the first set of digital images  
6 identified for the placement region in the placement region to generate the customized digital  
7 image comprises code for adjusting the digital image to fit the placement region.

1 69. The computer program product of claim 68 wherein the code for  
2 adjusting the digital image to fit the placement region comprises code for scaling the digital  
3 image to fit the placement region.

1 70. The computer program product of claim 68 wherein the code for  
2 adjusting the digital image to fit the placement region comprises code for cropping the digital  
3 image to fit the placement region.

1           71. A computer program product stored on a computer readable storage  
2 medium for generating a customized digital image, the computer program product  
3 comprising:

4                 code for receiving a signal comprising digital signals representative of a  
5 plurality of digital images;  
6                 code for determining a template image from the plurality of digital images;  
7                 code for determining one or more placement regions from the template image,  
8 each placement region of the one or more placement regions identifying a location on the  
9 template image for receiving a digital image from the plurality of digital images;  
10                code for identifying, for each placement region of the one or more placement  
11 regions, a digital image from the plurality of digital images to be placed in the placement  
12 region; and  
13                for each placement region of the one or more placement regions, code for  
14 placing a copy of a digital image from the plurality of digital images identified for the  
15 placement region in the placement region to generate the customized digital image.

1           72. A computer program product stored on a computer readable storage  
2 medium for generating a customized digital image, the computer program product  
3 comprising:

4                 code for receiving a first digital image;  
5                 code for analyzing the first digital image to determine a first placement region  
6 on the first digital image for placing a second digital image; and  
7                 code for placing the second digital image in the first placement region on the  
8 first digital image to generate the customized digital image.

1           73. The computer program product of claim 72 wherein the second digital  
2 image is a copy of a third digital image.

1           74. The computer program product of claim 73 further comprising:  
2                 code for creating a link between the second digital image placed in the first  
3 placement region in the first digital image and the third digital image.

1           75. The computer program product of claim 74 further comprising:  
2                 code for receiving a user input indicating selection of the second digital image  
3 placed in the first placement region in the customized image; and

1                           76.     The computer program product of claim 72 wherein the code for  
2 receiving the second digital image comprises:

3 code for scanning a paper medium on which the first placement region is  
4 marked to generate the first digital image.

1                           77.     The computer program product of claim 72 wherein the code for  
2 receiving the first digital image comprises:

3 code for photographing a paper medium on which the first placement region is  
4 marked to generate the first digital image.